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| Application No. <br> $10 / 764,446$ | Applicant(s) |  |
| :--- | :--- | :--- |
| KOCH ET AL. |  |  |.

## Office Action Summary

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

## A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. <br> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. <br> - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. <br> - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) $\boxtimes$ Responsive to communication(s) filed on 27 January 2004.

2a) $\square$
This action is FINAL.
2b) This action is non-final.
3) $\square$

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) $\boxtimes$ Claim(s) $1-35$ is/are pending in the application. 4a) Of the above claim(s) $\qquad$ is/are withdrawn from consideration.
5) $\square$ Claim(s) $\qquad$ is/are allowed.
6) $\boxtimes$ Claim(s) 1-14, 17-26, 29-30, and 32-34 is/are rejected.
7) $\boxtimes$ Claim(s) $15-16,27-28,31$, and 35 is/are objected to.
8) $\square$ Claim(s) ___ are subject to restriction and/or election requirement.

## Application Papers

9) $\square$ The specification is objected to by the Examiner.
10) $\boxtimes$ The drawing(s) filed on 27 January 2004 is/are: a) $\square$ accepted or b) $\boxtimes$ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121 (d).
11) $\square$ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119
12) $\boxtimes$ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) $\boxtimes$ All $\quad$ b) $\square$ Some * c) $\square$ None of:

1. Certified copies of the priority documents have been received.
2. $\square$ Certified copies of the priority documents have been received in Application No. $\qquad$ .
3. $\square$ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) $\boxtimes$ Notice of References Cited (PTO-892)
2) $\square$ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date $\qquad$ -.
4) Interview Summary (PTO-413) Paper No(s)/Mail Date. $\qquad$
5) $\square$ Notice of Informal Patent Application
6) $\square$ Other: $\qquad$ .

# DETAILED ACTION 

## Drawings

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the characters and lines in the drawings are unlikely to produce satisfactory reproduction (see 37 CFR 1.84(I)). Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 103

## (2)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148
USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-14, 20-26, 30, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 2,157,801 to L. Repper, ("Repper"), in view of United States Patent No. 5, 725,102 to L. Gustavsson ("Gustavsson") and United States Patent No. 3,831,610 to W. Wochnowski et al. ("Wochnowski").

Regarding Claim 1: Repper discloses a distributor device comprising:
an input device for the input of a product stream (page 1 col. 2 Line 30); a preliminary distributor (page 1 col. 1 lines 30-34) for distributing and loosening the product stream;
a store ${ }^{1}$ for receiving the product stream (page 1 col. 1 lines 9-35), a conveying element (page 1 col. 2 line 30 ) for transporting the product stream from said store to said accumulating shaft;

Repper does not expressly disclose:
the preliminary distributor being capable of measuring out the product stream, an accumulating shaft;
a sifter for separating fractions of the product stream;
at least one external delivery device for delivery of at least one additional component, wherein said at least one external delivery device is arranged between said store and said sifter relative to a transport direction of the product stream.

Gustavsson discloses:
an accumulating shaft (20a in figure 1, col. 3 lines 42-52) and, a sifter (13 in figure 1, see abstract) for separating fractions of the product stream;

Gustavsson and Repper are analogous art because Gustavsson relates directly to the problem of "effecting selective separation or classification of tobacco fibers" (Repper page 1, col. 1, lines 1-4). At the time of the invention it would have been obvious to a

[^0]person having ordinary skill in the art of tobacco processing to combine Repper and Gustavsson because Repper describes separation techniques as known in the tobacco processing art (Repper page 1, col. 1, lines 1-4) and separation would further purify the product. Among those techniques that were known at the time of invention was a zigzag separator as shown in figure 1 of United States Patent No. 3,624,748 to M. L. Strydom.

Wochnowski discloses:
the preliminary distributor being capable of measuring out the product stream (col. 10 line 66 - col. 11 line 11),
at least one external delivery device (element 2002 in figure 1; described in col. 3 lines 15-24) for delivery of at least one additional component (in this case tobacco), wherein said at least one external delivery device is arranged between said store and said sifter relative to a transport direction of the product stream ${ }^{2}$.

At the time of the invention it would have been obvious to a person having ordinary skill in the art of tobacco manufacturing to combine the Wochnowski with Repper. Wochnowski and Repper are analogous art because they both come from the art of manufacturing cigarettes. At the time of the invention it would have been obvious to a person having ordinary skill in the art to use the system of Wochnowski to blend tobacco (an additional component) with Repper's primary stream of tobacco because Wochnowski recognizes blending as one of the most important procedures in the manufacture of cigarettes (col. 1 lines 21-23).

[^1]Regarding Claim 2: Repper additionally describes the distributor device as being used to load a continuous cigarette machine (col. 1 lines 13-15).

Regarding Claim 3: Gustavsson additionally shows an accumulating shaft arranged behind the sifter relative to the transport direction (20a in figure 1, col. 3 lines 42-52). Regarding Claim 4: Gustavsson additionally shows an accumulating shaft arranged behind the sifter relative to the transport direction (20a in figure 1, col. 3 lines 42-52). Regarding Claim 5: The sifter of Gustavsson is structured and arranged to separate fractions of the product stream that are to be processed and not to be processed. Regarding Claim 6: The combination as described in the treatment of Claim 1 would deliver the at least one additional component to said product stream into said distributor device.

Regarding Claim 7: The combination as described in Claim 1 would have the external delivery device deliver the at least one additional component into the product stream. Regarding Claim 8: The logical combination of Repper and Wochnowski would include at least one additional store for receiving the at least one additional component because one skilled in the art would recognize that a separate hopper for a separate and distinct product stream is a logical extension of having one hopper for a single distinct product stream.

Regarding Claim 9: Wochnowski additionally discloses an additional conveying element (element 2002 as shown in figure 1 and described in col. 3 lines 15-25) associated with the one additional store (as described in the treatment of claim 8)

Regarding Claim 10: As in treatment of Claim 8 and Claim 9 the stores (hoppers) are associated with different conveying elements (col. 3 lines 15-25).

Regarding Claim 11: The at least one additional store as described in the treatment of claims $9-10$ is located in front of the sifter relative to the direction of transport of the product.

Regarding Claim 12: The sifter of Gustavsson further comprises a common approach ${ }^{3}$ from said delivery device (see the area immediately preceding sifter 13 in figure 1 )

Regarding Claim 13: The sifter of Gustavsson further comprises a common approach from said store and from at least one additional store (see the area immediately preceding sifter 13 in figure 1; also see how references are combined in claim 1) Regarding Claim 14: The sifter of Gustavsson may also be viewed as having more than one approach (see figure 1) where one approach consists of air supply conduit 17 and another approach consists of conduit 20b.

Regarding Claim 20: Operation of the device resulting from the combination of Repper, Gustavsson and Wochnowski as describved in the treatment of Claim 1 would perform a method for loading a continuous cigarette-making machine comprising the steps of:
introducing a product stream into a distributor device through an input device (Wochnowski, col. 3, lines 16-25);
distributing (Wochnowski, col. 3, lines 16-25), measuring out (Wochnowski, col.
3 , lines 40-50) and loosening (Repper col. 2 lines 30-34) of the product stream via a preliminary distributor,
storing (Repper page 1 col. 1 lines 9-35) the product stream in a store;
transporting (Wochnowski element 2001, figure 1 and col. 3, lines 16-20) the product stream via a conveying element (Wochnowski element 2001, figure 1

[^2]and col. 3, lines 16-20) from the store to one of an accumulating shaft and a sifter (Gustavsson figure 1 element 13; abstract);
sifting (Gustavsson figure 1 element 13; abstract) the product stream in the sifter; and
mixing the product stream with at least one further component (Wochnowski abstract) within the distributor device after the store (see treatment of claim 1 for order of components) relative to a transport direction of the product stream.

Regarding Claim 21: Gustavsson further shows the product stream being sifted (in sifter 13 in figure 1) before it is fed into the accumulating shaft (20a in figure 1).

Regarding Claim 22: Gustavsson further shows the product stream being sifted after being fed into an accumulating shaft (20b in figure 1).

Regarding Claim 23: The combination of references from claim 1 creates a distributor device in which the product stream is mixed with the at least one further component immediately before sifting. This is because the in the sifter of Gustavsson would be immediately preceded by either the sifter of Repper (col. 2 lines 30-35) or the blending elements of Wochnowski (abstract), both of which would serve to mix or further mix the product stream with the one further component.

## Regarding Claim 24: The logical combination of Repper and Wochnowski would

 include at least one additional store for receiving the at least one further component because one skilled in the art would recognize that a separate hopper for a separate and distinct product stream is a logical extension of having one hopper for a single distinct product stream.Regarding Claim 25: Further mixing would inherently take place within the sifter of Gustavsson (figure 1 element 13)

Regarding Claim 26: The logical combination of Repper and Wochnowski would include at least one additional store for receiving the at least one further component because one skilled in the art would recognize that a separate hopper for a separate and distinct product stream is a logical extension of having one hopper for a single distinct product stream. The entire described combination may be described as a device the components of which are within the device.

Regarding Claim 30: The air stream transporting the product through the sifter is disclosed in the abstract of Gustavsson. Figure 1 of Gustavsson shows a narrowing at the exit of the sifter (area immediately following sifter 13 in the direction of product flow in figure 1) One having ordinary skill in the art of cigarette making would recognize that the narrowing shown would necessitate a higher air speed at the exit of the sifter than within the sifter.

Regarding Claim 32: Mixing with at least on further component is described in the treatment of claim 20. Further, delivery by a common approach would be inherent to the use of the structure described in claim 12, and is therefore obvious.

Regarding Claim 33: Operation of the device as described in claim 1 would inherently take the product stream and the at least one further component from different stores within the distributor device.

Therefore it would have been obvious to combine Repper with Gustavsson and Wochnowski to obtain the invention as specified in claims 1-14, 20-26, 30, and 32-33.

Claims 17-19 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Repper, Gustavsson and Wochnowski as applied to Claim 1 above, and further in view of United States Patent No. 4,763,672 to J. L. Gregory III (Gregory).

Regarding Claims 17-19: Gregory discloses that it is well known to add material to the tobacco within a cigarette machine (col. 1 lines 27-29). The means for such delivery would be classified as "at least one further external delivery device positioned behind said sifter relative to said transport direction of the product stream." Gregory specifically mentions that "material can be added to the tobacco stream" (one further additive delivered into the product stream) in the cigarette maker. Gregory and Repper are analogous art because they both come from the art of cigarette manufacture. It would have been obvious to a person of ordinary skill in the art to incorporate the methods of providing additives to tobacco from Gregory to the device of Repper ${ }^{4}$ because Gregory relates to cigarette making machines, processing equipment which would logically follow the tobacco handling steps of Repper. Therefore it would have been obvious to combine Gregory with Repper to obtain the invention specified in Claims 17-19.
(4)

Claims 29 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Repper, Gustavsson and Wochnowski as applied to claim 20 above, and further in view of United States Patent No. 3,572,348 to Vello Norman ("Norman").

Regarding Claim 29: Norman discloses incorporating an additive prior to forming the tobacco into cigarette shapes. (col. 3 lines 53-66). Norman and Repper are analogous

[^3]art because they both come from the area of cigarette making. It would be obvious to use the additives of Norman in the way described by Norman because doing so would reduce the amounts of polycyclic aromatic compounds delivered to the smoker (abstract of Norman). The further component (the zeolite additive in Norman (abstract)) would be mixed with the product stream in a region at which the product stream exits the sifter because the combination suggested by Norman would put the catalyst incorporation right next to distributor device making the catalyst incorporation the next major process step following the sifting which would be classified as in the region at which the product stream exits the sifter.

Regarding Claim 34: The combination as described in the treatment of claim 29 above would inherently deliver at least one further additive to the mixture of the product stream and the at least one further component after the sifting. Therefore, it would be obvious to combine Repper with Norman to obtain the invention as specified in claims 29 and 34.

## Allowable Subject Matter

Claims $15,16,27,28,31$, and 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding Claims 15 and 16: The feature of separate approaches to the sifter one behind or above the other in relative to the direction of product flow was not found in the prior art.

Regarding Claims 27, 28, 31, and 35: The additional feature of delivering the product stream and the at least one further component to the sifter via separate approaches was not found.

## Conclusion

(6)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Edel whose telephone number is (571) 2724804. The examiner can normally be reached on 8:30 am to $5: 30 \mathrm{pm}$.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571 -273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


[^0]:    ${ }^{1}$ Store is interpreted broadly to include any supply or stock of something.

[^1]:    ${ }^{2}$ A logical combination of the Wochnowski, Gustavsson and Reeper would for the Hopper (store) mentioned in Reeper (page 1 col. 1 lines $9-35$ ) to precede the blending elements (external delivery device) of Wochnowski followed by the sifter of Gustavsson.

[^2]:    ${ }^{3}$ Approach is construed broadly to include any means of access. Common approach is construed broadly to include any means of access that is shared

[^3]:    ${ }^{4}$ A person having ordinary skill in the art of cigarette making would recognize that the device of Gregory would be after the device or Repper relative to the flow of product because of the typical arrangement of cigarette processing equipment.

